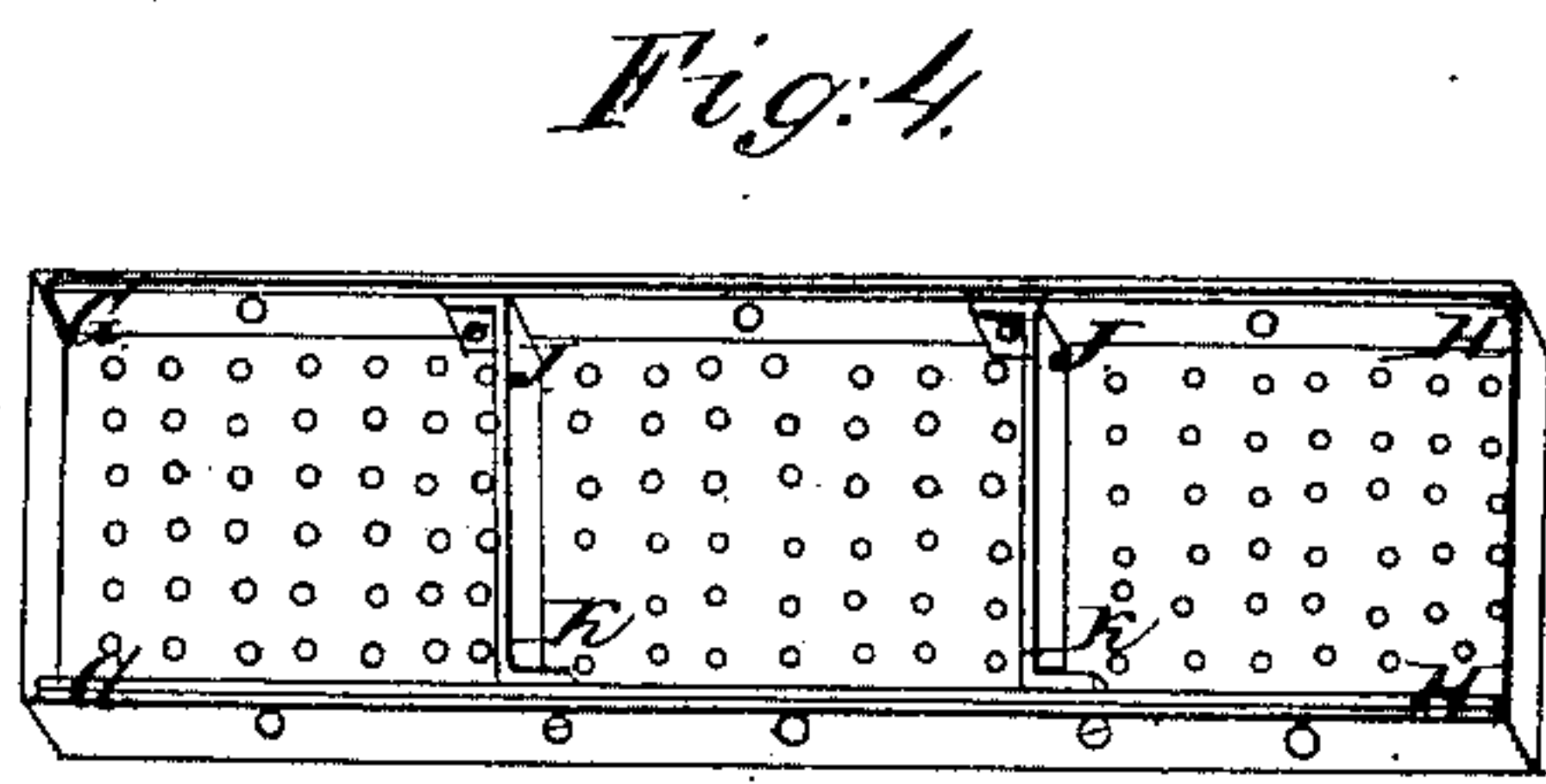
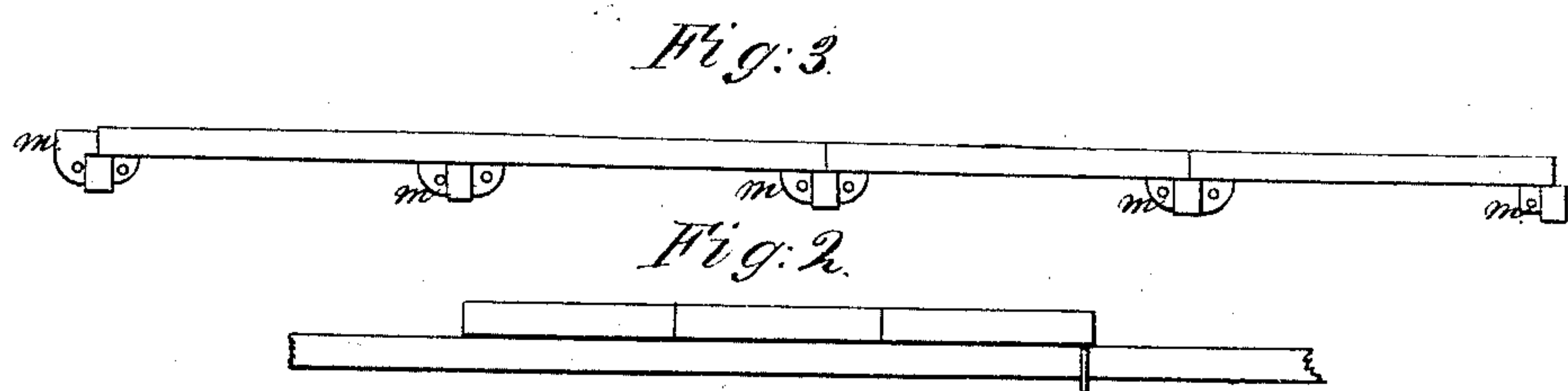
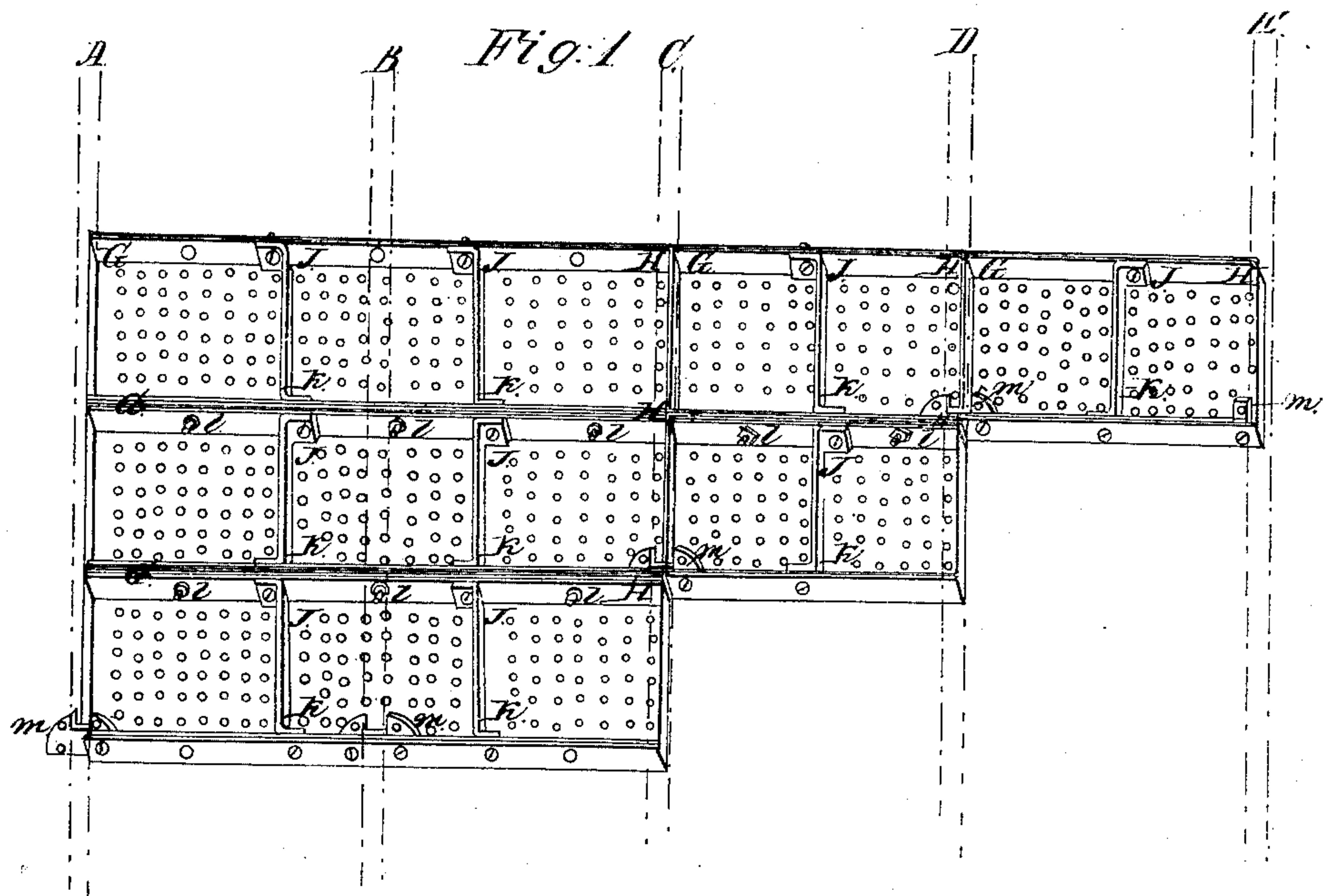


Hughes & Adams.

Iron Pavement.

N^o 61,202.

Patented Jan. 15, 1867.



Witnesses;
J. P. Mather
Geo. E. Buckley

Inventor;
W. H. Hughes
W. Adams

United States Patent Office

WILLIAM W. HUGHES AND JAMES C. ADAMS, OF PHILADELPHIA, PENN-
SYLVANIA.

Letters Patent No. 61,202, dated January 15, 1867.

IMPROVED FLOORING FOR MALT KILNS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, WILLIAM W. HUGHES and JAMES C. ADAMS, both of Philadelphia, in the State of Pennsylvania, have invented a new and useful improvement in the construction of the iron Flooring of Malt Kilns; and we do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a view of malt-kiln floor seen from below.

Figure 2, an end view corresponding to fig. 1.

Figure 3, a side view corresponding to fig. 1.

Figure 4, a detached plate of the floor.

Heretofore the floors of malt kilns have been supported, not directly upon the joists, but upon bars placed about one foot apart. Our improvement consists in making the plates of perforated sheet iron of sufficient length to extend directly over and rest upon one or more of the main joists, A B, C D, or E. One of these plates is shown in fig. 4, flanged upon all sides. It is about one-thirty-second of an inch thick, and is about one inch deep, and is stiffened by an iron plate or bar, G H, extending longitudinally along the inside of each of the side flanges, and riveted or bolted securely to the longitudinal flanges. These plates are also stiffened by transverse bars or plates, J K, bent at each end, and bolted or riveted to the plates and flanges. These transverse stays or braces J K are placed about fourteen inches apart. The flooring plates are laid side by side upon the joists, and the contiguous plates are secured together by pins, *l l l*, rivets, or bolts along their contiguous flanged edges G H. The plates rest upon the joists with the flanged edges downward, and are also secured to the joists by means of notched clips, *m m*, which fit upon the joist and have two holes for the insertion of a wire to tie them to the joists. The advantage of a floor constructed in this way is, that it makes a rigid level floor and dispenses with upper bars.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. Constructing malt-kiln floors of perforated flanged plates extending over two or more joists, stiffened by the side bars or slips G H, and the transverse bars or strips J K, the flanges of said plates being also secured together by pins, bolts, or rivets passing through the contiguous flanges.

2. We claim securing the flanged plates, constructed as above described, to the iron joists below by means of clips *m m*, and wires or their equivalents.

W. W. HUGHES,
JAS. C. ADAMS.

Witnesses:

GEO. E. BUCKLEY,
J. P. STIDHAM.